

Big picture issues

- Strategy Considerations - Does EPA really want to release the FS and THEN the Proposed Plan? It may be advisable to release the proposed plan and FS simultaneously, following a robust public availability session.
- Calling OU1 a “landfill” comes across as antagonistic and to the city, and is not a highly accurate statement.
- The fact sheet is light on Facts. Need more details added
- Ultimately, the fact sheet needs to be consistent with the Proposed Plan
- Consistently describe the sheeppile. It is described in several different and contradictory ways about whether it will all be removed, some will be removed or it will all be left in place.
- Consistently describe the contaminated material. (sometimes it is residuals, and other times paper waste)
- Consistently describe the Institution controls, as they appear sporadically in the various alternative descriptions. Alternative 3 is the only one that mentions covenants. What about the others?

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For more information

Open House Information?

EPA is hosting an information session to talk about cleanup options for the Allied Paper Landfill site. Sessions will be held at on ?? at ?? and at ??.

More Information

You can read more about the site at www.epa.gov/region5/cleanup/alliedpaper. The feasibility study is a ~~large-lengthy~~ document and the version on the website does not include appendices. You can call or email either Patricia Krause or Michael Berkoff for a CD of the study. Contact information is on the left-side of this fact sheet and also on the web site.

Field Code Changed

The entire feasibility study is available on CD at the information repository at the Kalamazoo Public Library, 315 South Rose and at the Waldo Library, Western Michigan University, 1903 West Michigan Avenue, Kalamazoo.

Contact EPA

If you have questions or concerns, please contact EPA:

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EPA Releases Detailed Report on Potential Cleanup Alternatives for Allied Landfill; Public Availability Sessions Coming This Fall

U.S. Environmental Protection Agency has completed the “feasibility study” for the Allied Landfill portion of the Allied Paper/Portage Creek/Kalamazoo River Superfund Site. This feasibility study (FS) is a detailed description and analysis of potential cleanup options for a site. ~~EPA does not propose a specific remedy in the FS. EPA will issue a separate document, the Proposed Plan, to present EPA’s preferred cleanup plan for Allied Landfill to the public. EPA does not have a release date for the Proposed Plan.~~

Cleanup Alternatives for Allied Paper Landfill

The Allied Paper Landfill is part of the Allied Paper/Portage Creek/Kalamazoo River Superfund site. Allied Paper Landfill occupies 89 acres including Portage Creek between Cork and Alcott streets in the City of Kalamazoo. ~~(see map on page?)~~

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Contamination

A study of the nature and extent of contamination at the site was completed for the Allied Paper Landfill in 2008 by the former PRP, Millenium. This study known as the remedial investigation focused on polychlorinated biphenyls (PCBs) and the report was authored by the MDEQ. The PCBs at the landfill are associated with paper-making residuals and come from the past recycling of carbonless paper. PCBs are the primary contaminant at Allied Landfill. The other pollutants identified to a lesser extent were metals and semi-volatile organic compounds. This study concluded that the conditions that exist at the site required the establishment of cleanup goals.

Evaluating Cleanup Alternatives

EPA completed the feasibility study for the Allied Paper Landfill which details and compares the cleanup alternatives that may take place at the landfill. The cleanup alternatives included in the report are: no further action (this is required at all sites); consolidation and capping; removal and disposal; and encapsulation and containment.

All of the cleanup alternatives would protect people's health and the environment over time. EPA will further evaluate these alternatives and select the one that best protects in the short and long term, uses treatment to reduce toxicity or mobility, and is cost-effective.

Common Elements of the Cleanup Alternatives

All of the alternatives (except the no-action one) require excavation of contaminated material in the former operations area near Alcott Street and contaminated material east of Portage Creek, ~~like at~~ including the Goodwill property and nearby residential properties. The different cleanup alternatives require different amounts of excavation in the other ~~areas~~ parts of the site.

Cleanup Goals

EPA has established cleanup goals that protect people's health and the environment and comply with state and federal regulations –for PCBs in soil, groundwater and sediment. ~~Exceeding those goals requires that action be taken.~~ EPA will sample soil and sediment and if the samples show certain levels of PCB contamination the soil and sediment will be excavated.

Once sampling shows that PCBs are below the cleanup goal, the areas will be backfilled with clean material. If the area is a wetland, the wetland will be restored and an environmental covenant will be put in place, requiring that the area remain a wetland. An environmental covenant is a long term land use control of the property.

A five year review of the site is also required whenever waste remains on-site. This will be required for some of the cleanup alternatives. The five-year review evaluates if the cleanup continues to protect people and the environment, and will be every five years in the future.

Below are the cleanup alternatives included in the FS.

Alternative 1 – No action

This alternative must be considered at every Superfund site. It means leaving soil and sediment in place with no engineering or maintenance. Five year site reviews will be part of this alternative.

Estimated cost: \$120,000.

Alternative 2 – Consolidation and Capping

Excavated materials at Allied Landfill will be consolidated in areas of the landfill known as the Monarch historical residual dewatering lagoon and the main body of the landfill which includes the former residual dewatering lagoon, the former Type III landfill and the Western disposal area. (See map on page ?.)

There are three versions of this alternative 2A, 2B and 2C.

- Alternative 2A leaves the Monarch historical residual watering lagoon in place under a cap. Monarch is a disposal area separated from the main body of the landfill by Portage Creek.
- Alternative 2B calls for the contaminated material at Monarch to be consolidated into the main body of the landfill.
- Alternative 2C is the same as 2B except that EPA will also look for areas of extremely high PCB concentrations and if found ship the PCBs off-site for incineration.

The consolidated area would be covered with an engineered landfill cap consisting of six layers. The six layers will include (from bottom to top):

- A non-woven geotextile layer
- A sand layer for gas venting
- An impermeable plastic ~~liner~~ cover - a sheet of strong plastic-like material to stop downward drainage of water and upward escape of gases
- A geosynthetic drainage layer that allows for liquid flow without soil loss
- A 24-inch-thick (minimum) drainage and soil protection layer and
- A six inch-thick (minimum) vegetated, topsoil layer.

During the design phase of this alternative, EPA will evaluate the necessity of the existing sheet-pile wall, a wall that extends below ground, stabilizing the ~~sloped bottom~~ or the toe edge of the existing landfill closest to the creek.

The sheet-pile wall may not be necessary in those cleanup alternatives that would involve pulling back large amounts of material from Portage Creek. An evaluation will determine if the sheet-pile wall can be removed completely or if parts of the wall are still needed to stabilize the base of the landfill along Portage Creek.

At those areas where contaminated material would be excavated and pulled back from Portage Creek, clean material would be put in place to act as a protective buffer to keep the energy of the river off the cap, Give a clean area to install monitor wells, and create distance between the waste and sensitive stream environment. (this is the kind of detail that will help people understand the vision) After that, more samples will be taken to make sure that cleanup goals have been achieved.

Monitoring wells and if necessary a ground water collection system would be installed between the landfill and Portage Creek. Monitoring the ground water that flows from a landfill is one way that EPA can observe if a cleanup is successful at preventing contamination from moving off-site. As a part of a long-term monitoring program, EPA would require that these wells be sampled regularly. This cleanup alternative also includes long-term inspections and maintenance of the newly installed engineered caps and the any remaining sheet pile.

Figure 2A

Alternative 2 A: Consolidation and Capping: Monarch Remains in Place

Estimated Cost: \$43 million

Figure 2B/2C

Alternative 2B: Consolidation and Capping: Monarch Materials Moved West of Portage Creek

Estimated Cost: \$41 million

Alternatives 2 A and 2B are similar in cost. Alternative 2A costs are higher due to the increased operation and maintenance GIVE EXAMPLES (grading, cap installation, gas venting, protection of toe from stream flow, monitoring of cap and placement and monitoring of wells).

Alternative 2C: Consolidation and Capping: Same as 2B with additional Excavation and Incineration

Estimated Cost: \$62 million

Same as Alternative 2B along with transporting off-site excavated soil and sediment with highest PCB concentrations. The excavated materials would be incinerated off-site and the cost would increase. It is estimated that five percent of the soils dug up would require offsite incineration.

Alternative 3 – Total Removal and Offsite Disposal

Estimated Cost: \$189 million

This cleanup would involve the total excavation of Allied Landfill. The extent of areas with PCB contaminated material will be identified confirmed and then be excavated. This ~~would include~~ all outlying areas and areas of the landfill with PCB contaminated materials. EPA estimates this to include approximately 1.5 million cubic yards of PCB-contaminated materials. These materials would be dug up and transported offsite to a commercial landfill. PCB-containing materials located under the Goodwill buildings

would not be removed. After excavation, sampling will take place to make sure that cleanup goals have been achieved. Wetland areas ~~that are excavated~~ will be backfilled with clean material and the area will be restored. The excavated and backfilled area will extend over 65 acres. ~~Covenants to maintain wetlands will be put in place~~ will be put in place after the cleanup activities are completed and will clearly separate those areas to be maintained as wetland, commercial, and industrial.

The total excavation alternative may take several years depending on factors like the size and depth of the contaminated area and the funding available for the cleanup. Since EPA estimates there are about 1.5 million cubic yards of contaminated material at Allied Landfill, total removal could take about five years if 100 percent funding of the cleanup were available. ~~This activity would require local traffic safety precautions as well as cause a greater amount of community disruption. In that~~ under this scenario, there would be an average of 115 truck trips per day, year-round for five years. If 100 percent funding were not available, the cleanup would extend over a longer period of time.

In addition, the sheet pile wall along the western bank of Portage Creek ~~will~~ be removed along with the ground water treatment system. If there is any ~~contaminated material (consistent reference)~~ left under buildings, ground water monitoring will be performed and covenants for land-use will be put in place.

Alternative 4 – Encapsulation Containment System

This alternative involves digging up PCB contaminated materials and encapsulating them in a new landfill on-site. The new landfill would be constructed ~~in areas of the current landfill~~ generally within the footprint of the existing disposal areas. This plan would include:

- ~~Constructing a bottom-liner, spanning the former landfill area.~~
- ~~Placing excavated materials on~~ within the newly constructed landfill liner.
- ~~Adding~~ Constructing a landfill cap over the new landfill area, to cover about 50 acres. This is the same cap as in Alternative 2.

Transport some material off-site and dispose in permitted landfills. The sheet pile wall may be removed along the western bank of Portage Creek. Portions of the sheet pile wall ~~will~~ may be left for a slope in the landfill and bank stability will be evaluated. Ground water monitor ~~well~~ss will be located outside areas ~~where waste remains of the constructed remedy to effectively monitor for the occurrence of any groundwater contamination.~~

Estimated Cost: \$136 million

Next Steps

EPA will be hosting public availability sessions in Kalamazoo during the fall and early winter of 2013. At these meetings, EPA will discuss the site conditions and the potential cleanup alternatives with the public. These availability sessions will be somewhat different than previous public meetings on the Kalamazoo site as EPA will use a poster session type format to present the topics. With this change, EPA is seeking to have more individualized and in-depth conversations with the public.

EPA will issue a separate document, the Allied Paper Landfill Proposed Plan, to present EPA's recommended cleanup plan for Allied Landfill to the public. EPA does not have a release date yet for the Proposed Plan.

The FS details a number of potential cleanups options for Allied Landfill. EPA will propose a specific alternative when it issues the Proposed Plan to the public. The release of the Proposed Plan will mark the beginning of the public comment period, during which EPA will be collecting public comments by mail or internet submission on the proposed cleanup.

During the comment period, EPA will host a public meeting on the Proposed Plan. EPA will present the proposed cleanup plan and people will have the opportunity to make formal comments. EPA will consider people's comments as it selects the cleanup for Allied Landfill. EPA has not yet scheduled the date of the Proposed Plan meeting/hearing, and will announce it to the public at least two weeks in advance.